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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/632,506

08/04/2003

John A. Bloore

51,179

4389

7590

07/27/2004

Neil John Graham  
6017 Lido Lane  
Long Beach, CA 90803

EXAMINER

O CONNOR, CARY E

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/632,506

**Applicant(s)**

BLOORE ET AL

**Examiner**

Cary E. O'Connor

**Art Unit**

3732

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8-4-03</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Pletcher (4,522,590). Pletcher shows an orthodontic ring comprising a continuous circular wire body 10 and a twisted hook portion 23 formed from the wire body. The body has a circumference and a diameter, each of which are chosen with respect to the size of the orthodontic bracket (see column 2, lines 40-46). As to claims 2, 3, 8 and 9, note the dimensions set forth in column 2, lines 40-46). As to claims 4 and 10, note that the figures show the wire as being a single strand. As to claim 7, note that the wire body may be oval (column 4, lines 28-30).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pletcher (4,522,590). Claims 6 and

12 are considered product by process claims and the product itself does not depend on the process of making it. The method steps claimed do not impart a distinctive structural characteristic to the claimed tie and would have been an obvious method to make the tie.

Claims 13-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pletcher (4,522,590) in view of Hanson (5,885,074). Pletcher does not disclose that the wire body is rectangular. Hanson shows a tie for an orthodontic bracket. The tie may be circular (Fig. 1) or rectangular (Fig. 2). It would have been obvious to one of ordinary skill in the art to make the tie of Pletcher with a rectangular shape, in view of Hanson, if a certain amount of friction on the archwire (that the rectangular shape would give) is desired. Claim 18 is considered product by process claims and the product itself does not depend on the process of making it. The method steps claimed do not impart a distinctive structural characteristic to the claimed tie and would have been an obvious method to make the tie.

Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pletcher (4,522,590) in view of Andreiko et al (5,018,969). Pletcher does not disclose that the tie is made of a multiple strand of two or more wires. Andreiko shows an archwire comprised of a multiple strand of at least two wires. A multiple strand wire is easier to shape than a single strand wire (column 2, lines 3-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tie of Pletcher of a multiple strand wire, in view of Andreiko, in order to make it easier to form the hook.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pletcher (4,522,590) in view of Hanson (5,885,074) as applied to claim 13 above, and further in view of Andreiko et al (5,018,969). Pletcher does not disclose that the tie is made of a multiple strand of two or more wires. Andreiko shows an archwire comprised of a multiple strand of at least two wires. A multiple strand wire is easier to shape than a single strand wire (column 2, lines 3-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tie of Pletcher as modified by Hanson of a multiple strand wire, in view of Andreiko, in order to make it easier to form the hook.

#### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

#### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "22" has been used to designate two different elements in Fig. 6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "61" has been used to designate two different elements in Figs. 9 and 10. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 55 (page 5, line 14), 56 (page 5, line 15), 57 (page 5, line 17), 2 (page 6, line 4). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 31 (Fig. 4), 42 (Fig. 5) and 43 (Fig. 6). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 703-308-2701. The examiner can normally be reached on M-F 7:00am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on 703-308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

*Cary E O'Connor*  
Cary E. O'Connor  
Primary Examiner  
Art Unit 3732

ceo  
July 23, 2004